1-888-340-0482 Monday-Friday 8:30-5:30 Central Time



Keys Fitness Products, L.P. 4009 Distribution Dr. Suite 250 Garland, Texas 75041



# **OWNER'S MANUAL**

# **QUESTIONS?**

Call Our Toll Free Keys Fitness Helpline 1-888-340-0482



Keys Fitness Products, L.P. P.O. Box 551239 Dallas, Texas 75355-1239

### **CAUTION!**

Please read the precautions and instructions in this manual before using this equipment. Please save this manual for future reference.



# Keys Fitness is committed to quality products that demonstrate our commitment to excellence!

# ALLIANCE ELLIPTICAL TRAINER Model: ET920D

### **Questions?**

Please call if:

- you need assistance about operating your exercise bike
- · parts are missing
- parts become worn or need to be replaced

1-888-340-0482 Monday-Friday 8:30-5:30 Central Time

When requesting information please have the following available:

- The Name
- The Model
- The Part Number
- The Description

# KEYS FITNESS PRODUCTS, LP - LIMITED WARRANTY

PRODUCT:
HOME USE WARRANTY:

ALLIANCE 920D ELLIPTICAL TRAINER
Frame: Liftetime, Parts: 2 Years, Labor: 1 Year

This Limited Warranty applies in the United States and Canada to products manufactured or distributed by Keys Fitness Products, LP ("Keys") under the KEYS brand name. The warranty period to the original purchaser is listed above in the table.

Keys warrants that the Product you have purchased for use from Keys or from an authorized Keys reseller is free from defects in materials or workmanship under normal use during the warranty period. Your sales receipt, showing the date of purchase of the Product, is your proof of purchase. This warranty only extends to you, the original purchaser. It is not transferable to anyone who subsequently purchases the Product from you. It excludes expendable parts (wear items). Wear items pertain to components that might need to be replaced due to normal wear and tear. These items vary per product but will include computer overlays, pedal straps, rope cords, seats, grips, chains, bottom bracket assemblies, pads, upholstery, pulleys, bearings, etc. Please contact a Keys Fitness customer service representative for specifics on wear items. This Limited Warranty becomes VALID ONLY if the product is purchased through a Keys Fitness authorized dealer unless otherwise authorized by Keys Fitness in writing.

During the warranty period Keys will repair or replace (at Keys' option) the product if it becomes defective, malfunctions, or otherwise fails to conform with this Limited Warranty under normal use. In repairing the Product, Keys may replace defective parts, or at the option of Keys, serviceable used parts that are equivalent to new parts in performance. All exchanged parts and Products replaced under this warranty will become the property of Keys. Keys reserves the right to change manufacturers of any part to cover any existing warranty.

This warranty DOES NOT COVER shipping charges, export taxes, custom duties and taxes, or any other charges associated with transportation of the parts or Product.

To obtain warranty service, you must contact a Keys authorized retailer, service technician or Keys Fitness at our phone numbers located in this manual. Any parts determined to be defective must be returned to Keys to obtain warranty service. You must prepay any shipping charges, export taxes, custom duties and taxes, or any other charges associated with transportation of the parts or Product. In addition, you are responsible for insuring any parts or Product shipped or returned. You assume the risk of loss during shipment. You must present Keys with proof-of-purchase documents (including the date of purchase). Any evidence of alteration, erasing or forgery of proof-of-purchase documents will be cause to void this Limited Warranty.

This warranty does not extend to any product not purchased from Keys or from an authorized Keys reseller. This Limited Warranty does not extend to any Product that has been damaged or rendered defective; (a) as a result of accident, misuse, or abuse; (b) by the use of parts not manufactured or sold by Keys; (c) by modification of the Product or normal wear and tear; (d) operation on incorrect power supplies; or (e) as a result of service by anyone other than Keys, or an authorized Keys warranty service provider. Product on which the serial number has been defaced or removed is not eligible for warranty service. Should any Product submitted for warranty service be found ineligible, an estimate of repair cost will be furnished and the repair will be made if requested by you upon Keys' receipt of payment or acceptable arrangements for payment.

EXCEPT AS EXPRESSLY SET FORTH IN THIS WARRANTY, KEYS MAKES NO OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. KEYS EXPRESSLY DISCLAIMS ALL WARRANTIES NOT STATED IN THIS LIMITED WARRANTY. ANY IMPLIED WARRANTIES THAT MAY BE IMPOSED BY LAW ARE LIMITED TO THE TERMS OF THIS LIMITED WARRANTY. NEITHER KEYS NOR ANY OF ITS AFFILIATES SHALL BE RESPONSIBLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS OR THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS OR EXCLUSION MAY NOT APPLY TO YOU. This Limited Warranty gives you specific legal rights and you may also have other rights that may vary from state to state. This is the only express warranty applicable to Keys-branded products. Keys neither assumes nor authorizes anyone to assume for it any other express warranty.

PLEASE SEND IN THE ATTACHED WARRANTY CARD WITHIN TEN (10) DAYS OF PURCHASE TO REGISTER YOUR UNIT WITH KEYS FITNESS PRODUCTS. LP.

MAIL WARRANTY CARD TO: KEYS FITNESS PRODUCTS. PO BOX 551239. DALLAS. TX 75355

# **Before You Start**

Thank you for purchasing a Keys Elliptical Trainer! This quality product you have chosen was designed to meet your needs for cardiovascular exercise.

Prior to assembly, remove components from the box and verify that all the listed parts were supplied. Assembly instructions are described in the following steps and illustrations.

# Important Safety Information WARNING!

- 1) Before using this elliptical trainer or starting any exercise program, consult your physician. This is especially important for persons over the age of 35 and/or persons with pre-existing health problems. Keys Fitness Products LP assumes no responsibility for personal injury or property damage sustained by or through the use of this product.
- 2) To reduce the risk of electrical shock, burns, fire or other possible injuries to the user, it is important to review this manual and the following precautions before operation.

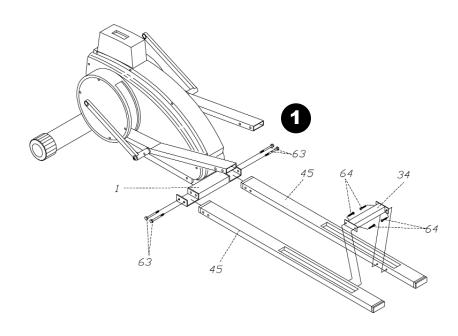
# **Safety Precautions and Tips**

It is the owner's responsibility to ensure that all users of this elliptical trainer have read the Owner's Manual and are familiar with warnings and safety precautions.

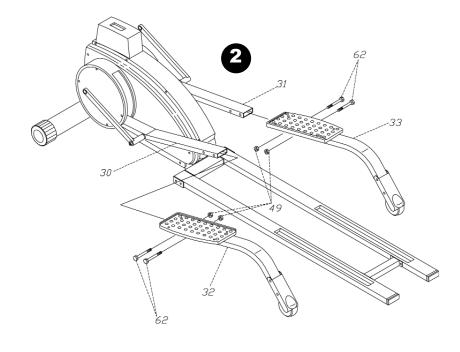
- This elliptical trainer has a maximum user capacity of 300 pounds.
- The Alliance Elliptical Trainer should only be used on a level surface and is intended for indoor use only. It should not be placed in a garage, patio or near water. Keys recommends an equipment mat be placed under the unit to the protect the floor or carpet and for easier cleaning.
- Wear comfortable, good-quality walking or running shoes and appropriate clothing. Do not use this elliptical trainer with bare feet, sandals, socks or stockings!
- Always examine your elliptical trainer before using to ensure all parts are in working order.
- Do not leave children unsupervised near or on the elliptical trainer.
- Never operate the elliptical trainer where oxygen is being administered or where aerosol products are being used.
- Never insert any object or body parts into any opening.
- Service to your Alliance Elliptical Trainer should only be performed by an authorized service representative, unless authorized and/or instructed by a Keys technician. Failure to follow these instructions will void the warranty.

# Assembly of Alliance ET920D Elliptical Trainer

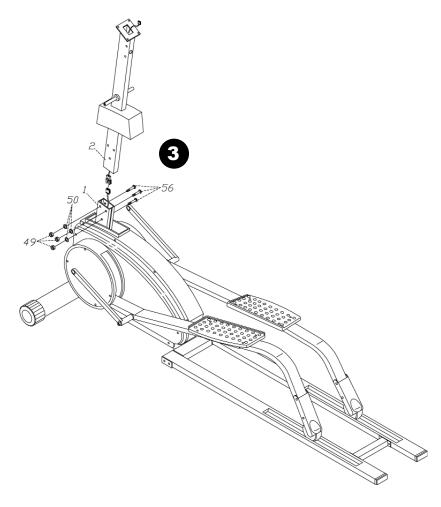
REMOVE ALL SECURITY TAPE AND WRAPPING BEFORE BEGINNING.



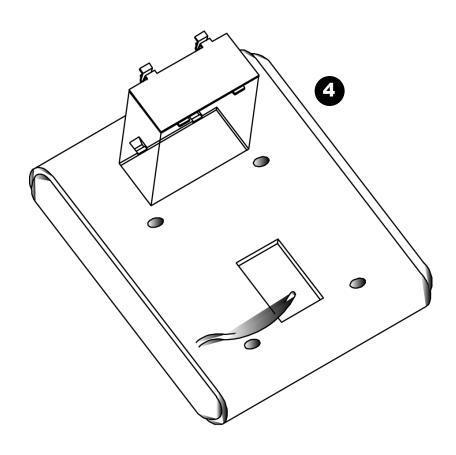
**1.** Attach the Aluminum Extrusions (45) to the Main Frame Assembly (1) with Screws (63). Connect the Aluminum Extension Plate (34) between the Extrusions (45) with Screws (64).



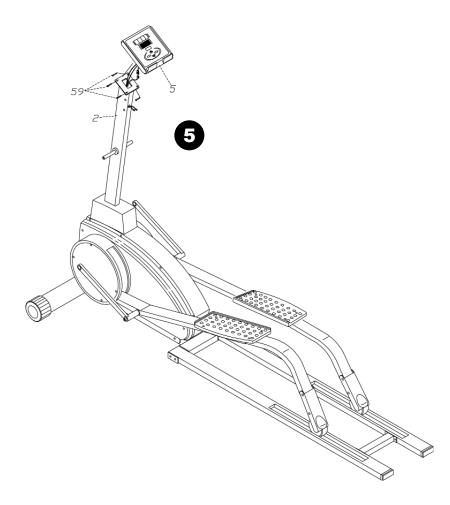
**2.** Attach both the Left and Right Rear Foot Frames (32, 33) to the Left and Right Front Foot Frames (30,31) with Carriage Bolts (62) and Locknuts (49).



**3.** First connect the Controller Extension Wire (27). Then slide the Main Upright (2) onto the Main Frame Assembly (1) and secure with Screws (56), Flat Washers (50) and Locknuts (49).

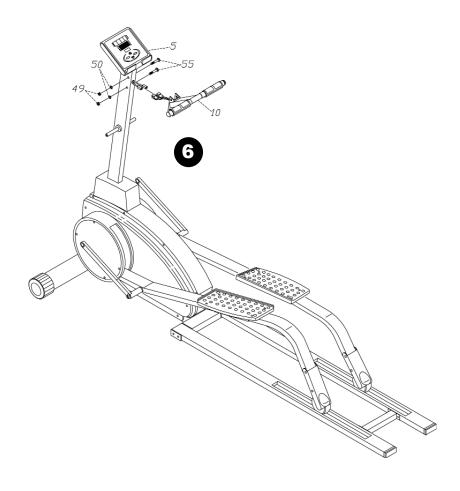


**4.** Insert the batteries provided into the back of the Monitor (5)

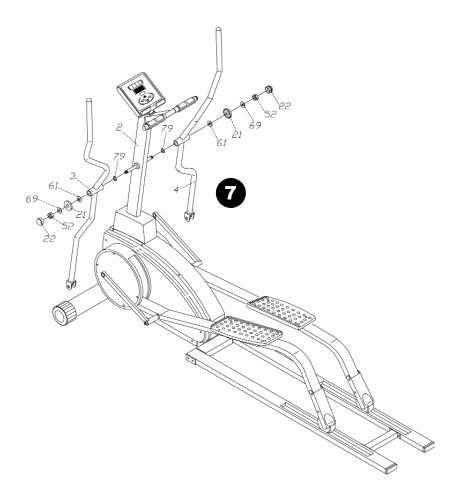


**5.** Feed the two Pulse Wires (26) from the Console (5) down into the Main Upright (2) and out the handlebar hole. Connect the Controller Wire (28) to the Console (5). Then connect the Monitor (5) to the Main Upright (2) with Screws (59).

8

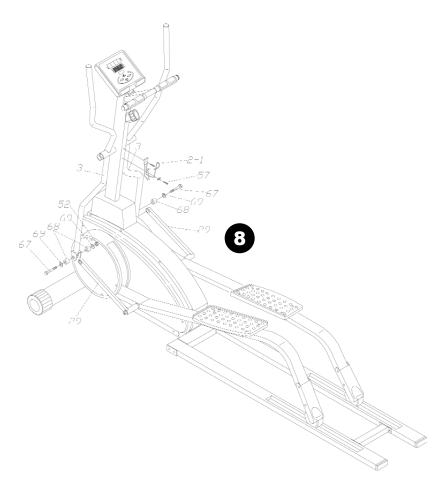


**6.** First connect the Pulse Wires (26) to the T-Shaped Handlebar (10). Then connect the T-Shaped Handlebar (10) to the Main Upright (2) with Screws (55), Flat Washers (50) and Locknuts (49).



**7.** Slide on Curved Washers (79) then the left and right handlebars (3, 4) onto the Main Upright (2). Secure handlebars with Washers (61), Snap Caps (21), Washers (69), Nuts (52), and Nut Caps (22).

10



**8.** Secure the Connecting Arms (29) to the left and right handlebars (3, 4) with Screws (67), Washers (69), Caps (68), and Nuts (52). Attach bottle rack (2-1) to Main Upright (2).

# **ET920D EXPLODED VIEW**

# ET 920D

# ET920D PARTS LIST

| #   | PART Q                   | TY           | #             | PART                  | QTY |
|-----|--------------------------|--------------|---------------|-----------------------|-----|
| 1   | MAIN FRAME ASSEMBLY      | <u></u><br>1 | <u></u><br>43 | IDLER PULLEY          | 1   |
| 2   | MAIN UPRIGHT             | 1            | 44            | ROLLER                | 2   |
| 2-1 | BOTTLE RACK              | 1            | 45            | ALUMINUM EXTRUSION    | 2   |
| 3   | LEFT FOAM HANDLE         | 1            | 46            | M6 LOCKNUT            | 4   |
| 4   | RIGHT FOAM HANDLE        | 1            | 47            | M6 HEX NUT            | 3   |
| 5   | MONITOR                  | 1            | 48            | M10 CAP NUT           | 2   |
| 6   | PULLEY                   | 1            | 49            | M8 LOCKNUT            | 10  |
| 7   | GENERATOR                | 1            | 50            | M8 IDX18.8mm OD       |     |
| 8   | CONTROLLER BOARD         | 1            |               | FLAT WASHER           | 12  |
| 9   | V-BELT                   | 1            | 51            | M20X32X2mm WASHER     | 4   |
| 10  | T-SHAPED HANDLEBAR       | 1            | 52            | M10 NUT               | 10  |
| 11  | BOTTOM LEFT HOUSING      | 1            | 53            | M8X17mm SCREW         | 1   |
| 12  | BOTTOM RIGHT HOUSING     | 1            | 54            | M8X38mm SCREW         | 1   |
| 13  | TOP HOUSING              | 1            | 55            | M8X57mm SCREW         | 2   |
| 14  | CONSOLE TUBE COLLAR      | 1            | 56            | M8X60mm SCREW         | 3   |
| 15  | ROUND COVER              | 1            | 57            | TP4X12mm SCREW        | 48  |
| 16  | FOOT PEDAL               | 1            | 58            | TP5X50mm SCREW        | 4   |
| 17  | END CAP                  | 1            | 59            | M5X10mm SCREW         | 4   |
| 18  | ROLLER CAP               | 2            | 60            | M6X15mm               | 8   |
| 19  | FOOT CAP                 | 1            | 61            | M10X38 WASHER         | 4   |
| 20  | WHEEL                    | 2            | 62            | M8X80mm CARRIAGE BOLT | 4   |
| 21  | SNAP CAP                 | 2            | 63            | M8X100 mm SCREW       | 4   |
| 22  | NUT CAP                  | 2            | 64            | M8X15mm SCREW         | 6   |
| 23  | 38mm BALL PLUG           | 2            | 65            | M10X55-8mm SCREW      | 2   |
| 24  | 31.8mm BALL PLUG         | 2            | 66            | M10X48 MACHINE SCREW  | 2   |
| 25  | HAND PULSE               | 2            | 67            | M10X58mm SCREW        | 2   |
| 26  | PULSE WIRE               | 2            | 68            | 15.8X10X4.3 CAP       | 4   |
| 27  | CONTROLLER EXT. WIRE     | 1            | 69            | M10X23mm WASHER       | 4   |
| 28  | CONTROLLER WIRE          | 1            | 70            | 25mm BUSHING          | 8   |
| 29  | CONNECTING ARM           | 2            | 71            | NUT CAP               | 4   |
| 30  | LEFT FRONT FOOT FRAME    | 1            | 72            | CRANK NUT             | 2   |
| 31  | RIGHT FRONT FOOT FRAME   | 1            | 73            | LEFT CRANK            | 1   |
| 32  | LEFT REAR FOOT FRAME     | 1            | 74            | RIGHT CRANK           | 1   |
| 33  | RIGHT REAR FOOT FRAME    | 1            | 75            | SHAFT BUSHING         | 2   |
| 34  | ALUMINUM EXTENSION PLATE |              | 76            | JOINITER              | 2   |
| 35  | 6004 PRECISE BEARING     | 6            | 77            | M8X30mm WASHER        | 2   |
| 36  | 608 PRECISE BEARING      | 8            | 78            | RETAINING RING        | 2   |
| 37  | 38mm HANDLEBAR SLEEVE    | 2            | 79            | M26 CURVED WASHER     | 4   |
| 38  | 76mm BUSHING             | 4            | 80            | M16X28 WASHER         | 2   |
| 39  | BELT TENSION BRACKET     | 1            | 81            | M8 NUT                | 3   |
| 40  | ADJUSTMENT CHANNEL       | 2            | 82            | 38mm END CAP          | 2   |
| 41  | EYEBOLT                  | 3            | 83            | 31.8mm END CAP        | 2   |
| 42  | SPRING                   | 1            | 84            | 13.7 X 10X8 CAP       | 4   |

# **ET920D Display Instructions**

Your Alliance ET920D is equipped with a programmable monitor to help you track your progress and motivate you to reach your fitness goals. In order to set your programmable monitor, you must begin pedaling.

# 1. Key Functions:

- a. **RESET** Resetting all cumulative values to zero.
- b. **ENTER** Confirming of "set values," "selections" and "Quick Start" function.
- c. Increasing and decreasing the set values and resistance during Operation.

# 2. Display:

There are three displays in the console:

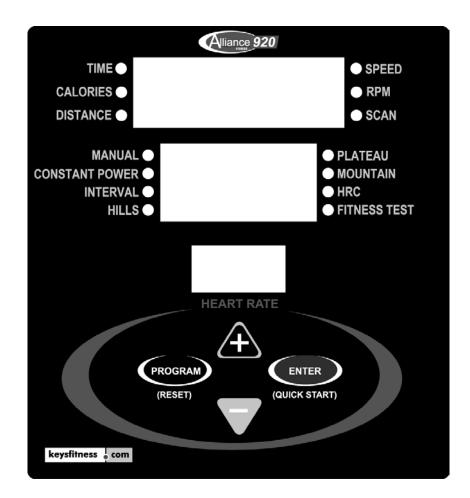
W1= display window on top, W2=display window in middle and W3= last display window at bottom of console.

a. **W1** = Display every cumulative value including TIME, CALORIES, DISTANCE, SPEED and RPM.

- b. **W2** =
  - 1. display profile of every program.
  - 2. display operation information in input mode by rolling characters.
  - 3. display "score" when "Fitness Test" program is finished. (see step 4D)



c. **W3** = Display "Heart Rate" and "Workout Level."



## 3. Indicator:

- a. TIME
- b. CALORIES
- d. SPEED
- e. RPM
- f. SCAN
- g. MANUAL
- h. CONSTANT POWER
- i. INTERVAL
- j. HILLS
- k. PLATEAU
- 1. MOUNTAIN
- m. HRC
- n. FITNESS TEST

# 4. Operation Process:

### A. "QUICK START" MODE:

- 1. Press **RESET** key, all LED of the console turns on for 2 seconds.
- 2. Press **ENTER** key during 2 seconds in step 1, the console is in "Quick Start" mode, and displays the profile of "Manual" program.
- 3. "TIME" and "SCAN" indicators of (**W1**) turn on. Operation time is counting up and every display value of (**W1**) is scanning per 4 seconds interval.
- 4. **(W2)** displays each column as 1 minute of operation then the completed column will shift to the right.
- 5. Exerciser can adjust working level by keys
- 6. Stop this mode by pressing **RESET** key.

# B. "MANUAL," "CONSTANT POWER," "INTERVAL," "HILLS," "PLATEAU" and "MOUNTAIN" programs.

- 1. Press RESET key, (W2) displays ENTER WEIGHT
- 2. Preset weight of exerciser by **A** keys.
- 3. Press ENTER key, (W2) displays "SELECT PROGRAM".
- 4. Choose desired program by keys and indicators of desired program turn on. Corresponding profile of program is displayed on (**W2**).
- 5. Press **ENTER** key, **(W2)** displays "WORKOUT TIME" and **(W1)** displays preset time value of last operation.
- 6. Set new time value by keys.
- 7. Press **ENTER** key.
- 8. (W2) displays "PRESS ENTER TO BEGIN"
- 9. Press **ENTER** key and start to exercise.

# C. "HRC" program.

- 1. Step 1 to 6 is similar to **B**, but "HRC" program also requires age and target heart rate.
- 7. Press **ENTER** key, **(W2)** displays "ENTER AGE" and **(W1)** displays preset age of last operation.
- 8. Set age of exerciser by keys.
- Press ENTER key, (W2) displays "TARGET HART RATE," (W1) displays preset value of target heart rate, which depends on age of the exerciser.
- 10. Choose target heart rate by **A** keys.
- 11. Press **ENTER** key.
- 12. (W2) displays "PRESS ENTER TO BEGIN"
- 13. Press **ENTER** key and start to exercise.

### D. "FITNESS TEST" program.

This 8 minute test program calculates your approximate oxygen uptake. At the end of the program you will receive a Fit Test Score which is the equivalent of your approximate VO2 max. This number should be used as a reference to gauge aerobic improvements over an extended workout protocol. Please use the following table for reference only:

# Standards for evaluating aerobic fitness (VO2 max)

|              |     |       |         |       | - (  |
|--------------|-----|-------|---------|-------|------|
| Age          | Low | Fair  | Average | Good  | High |
| <u>Women</u> |     |       |         |       |      |
| 20-29        | <24 | 24-30 | 31-37   | 38-48 | >49  |
| 30-39        | <20 | 20-27 | 28-33   | 34-44 | >45  |
| 40-49        | <17 | 17-23 | 24-30   | 31-41 | >42  |
| 50-59        | <15 | 15-20 | 21-27   | 28-37 | >38  |
| 60-69        | <13 | 13-17 | 18-23   | 24-34 | >35  |
|              |     |       |         |       |      |
| <u>Men</u>   |     |       |         |       |      |
| 20-29        | <25 | 25-33 | 34-42   | 43-52 | >53  |
| 30-39        | <23 | 23-30 | 31-38   | 39-48 | >49  |
| 40-49        | <20 | 20-26 | 27-35   | 36-44 | >45  |
| 50-59        | <18 | 18-24 | 25-33   | 34-42 | >43  |
| 60-69        | <16 | 16-22 | 23-30   | 31-40 | >41  |
|              |     |       |         |       |      |

- Step 1-4 is similar to B, but "FITNESS TEST" program also requires age and sex of user.
- 5. Press **ENTER** key, (**W2**) displays "ENTER AGE" and (**W1**) displays preset age of last operation.
- 6. Set age of the exerciser by **A** keys.
- 7. Press ENTER key, (W2) displays "SET SEX,"
- 8. Choose "MALE" or "FEMALE" by keys, (**W1**) displays **MALE** or **FEMALE** correspondingly.
- 9. Press ENTER key, (W2) displays "PRESS ENTER TO BEGIN"
- 10. Press **ENTER** key and start to exercise.

### E. START MODE

- 1. Each column of (**W2**) represents one minute of operation when time is being counted up.
- 2. In **(W2)** presetting time value divided by 16 is equal to each column when operation time is being counted down.
- 3. Press **ENTER** key to change the "SCAN" function in operation and the corresponding indication of "SCAN" will turn on or off.
- 4. The exerciser can adjust workout level by using keys in operation except during "FITNESS TEST" program.

### F. RESULT MODE

- 1. When operation time is finished, the console is in "Result state", (**W1**) displays the following data in 4 second intervals.
  - a. Total operation time.
  - b. Cumulative calories.
  - c. Cumulative distance.
  - d. Average speed.
  - e. Average RPM.
- 2. **W3** displays "average heart rate"
- 3. **W2** displays "RESULTS MODE" and shows profiles of every program for 2.5 seconds sequentially, except in "FITNESS TEST" program.
- 4. **W2** displays "SCORE=000" when "FITNESS TEST" Program is completed.

# **Monitoring Your Heart Rate**

To obtain the greatest cardiovascular benefits from your exercise workout, it is important to work within your target heart rate zone. The American Heart Association (AHA) defines this target as 60%-75% percent of your maximum heart rate.

Your maximum heart rate may be roughly calculated by subtracting your age from 220. Your maximum heart rate and aerobic capacity naturally decreases as you age. This may vary from one person to another, but use this number to find your approximate effective target zone. For example, the maximum heart rate for an average 40 year-old is 180 bpm. The target heart rate zone is 60%-75% of 180 or 108-135 bpm. See *Fitness Safety* on page 20.

Before beginning your workout, check your normal resting heart rate. Place your fingers lightly against your neck, or against your wrist over the main artery. After finding your pulse, count the number of beats in 10 seconds. Multiply the number of beats by six to determine your pulse rate per minute. We recommend taking your heart rate at these times; at rest, after warming up, during your workout and two minutes into your cool down, to accurately track your progress as it relates to better fitness.

During your first several months of exercising, the AHA recommends aiming for the lower part of the target heart rate zone-60%, then gradually progressing up to 75%.

According to the AHA, exercising above 75% of your maximum heart rate may be too strenuous unless you are in top physical condition. Exercising below 60% of your maximum will result in minimal cardiovascular conditioning.

Check your pulse recovery rate – If your pulse is over 100 bpm five minutes after you stop exercising, or if it's higher than normal the morning after exercising, your exertion may have been too strenuous for your current fitness level. Rest and reduce the intensity next time.

**Fitness Safety** The target heart rate chart indicates average rate zones for different ages. A variety of different factors (including medication, emotional state, temperature and other conditions) can affect the target heart rate zone that is best for you. Your physician or health care professional can help you determine the exercise intensity that is appropriate for your age and condition.

(MHR) = Maximum Heart Rate

(THR) = Target Heart Rate

220 - age = maximum heart rate (MHR).

MHR x .60 = 60% of your maximum heart rate.

MHR x .75 = 75% of your maximum heart rate.

For example, if you are 30 years old, your calculations will be as follows:

220 - 30 = 190

 $190 \times .60 = 114$  (low end or 60% of MHR)

 $190 \times .75 = 142$  (high end or 75% of MHR)

30 year-old (THR) Target Heart Rate would be 114-142.

See Table on right for additional calculations.

